

19301 JP Hiraki 06-10-04

PA02-293

12

English abstract of reference 1

# PATENT ABSTRACTS OF JAPAN

10-170471

(11)Publication number :

26.06.1998

(43)Date of publication of application :

(51)Int. Cl.

G01N 27/28

G01N 27/327

(21)Application number : 08-340423

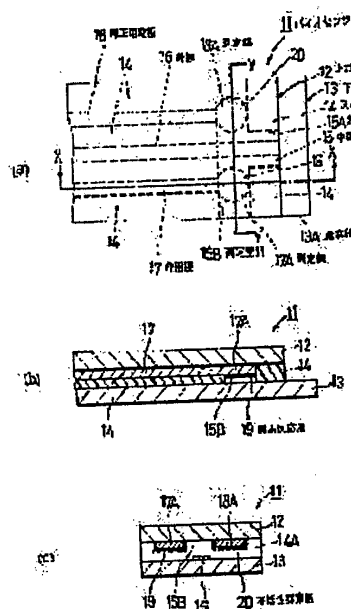
(71)Applicant : CASIO COMPUT CO LTD

(22)Date of filing :

06.12.1996

(72)Inventor : TOYAMA TADAHISA

(54) BIOSENSOR



(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a biosensor which can introduce a sample solution quickly to an introduction space and can be manufacture with ease.

**SOLUTION:** An operating electrode 17 and a correction electrode 18 are formed to be parallel to each other on a lower face of an upper glass substrate 12. An opposite electrode 16 is formed at an upper face of a lower glass substrate 13. The upper and lower glass substrates 12, 13 are bonded via a spacer 14 so that the operating electrode 17, correction electrode 18 and opposite electrode 16 are exposed in a hollow part 15 defined by a T-shaped notch in the

spacer 14 and upper and lower glass substrates 12, 13. At the same time, the operating electrode 17 and correction electrode 18, and the opposite electrode 16 are arranged not to overlap with each other on a plane. In the structure, a sample solution introduced from a sample solution introduction port 15A is easily sent into a measurement space 15B by a capillary phenomenon without being influenced by the water-repellency of the opposite electrode. Accordingly, a concentration can be measured quickly.

---

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Case 19301 JP  
Sdr. Hiraki 6.10.04

English translation of "Brief Description of the Drawings" of JP  
Patent Publication (unexamined application) No. H10-170471

Brief Description of the Drawings

[Figure 1]

Figure 1 (a) is a plain view of the biosensor of an embodiment according to the present invention.

Figure 1 (b) is a sectional view taken along line X-X of Figure 1 (a).

Figure 1 (c) is a sectional view taken along line Y-Y of Figure 1 (a).

[Figure 2]

Figure 2 (a) is a plain view of a conventional biosensor.

Figure 2 (b) is a sectional view taken along line A-A of Figure 2 (a).

Figure 2 (c) is a plain view showing an opposite electrode.

Explanations of Letters or Numerals

- 11. a biosensor
- 12. an upper glass substrate
- 13. a lower glass substrate
- 14. a spacer
- 15. a hollow part
- 15A. a sample solution introduction port
- 15B. a measurement space
- 16. a counter electrode
- 17. a working electrode
- 17A. a measurement part
- 18. a calibration electrode
- 18A. a measurement part
- 19. an enzyme-reaction layer
- 20. an inactivate enzyme-layer